

IFW16

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/581,651C

DATE: 08/05/2004 TIME: 10:25:18

Input Set : A:\ERPO1.003APC.TXT

Output Set: N:\CRF4\08052004\I581651C.raw

4 <110> APPLICANT: Schor, Seth Lawrence Schor, Ana Maria 7 <120> TITLE OF INVENTION: Polypeptides, Polynucleotides and Uses Thereof 10 <130> FILE REFERENCE: ERPO1.003APC 12 <140> CURRENT APPLICATION NUMBER: 09/581,651C 13 <141> CURRENT FILING DATE: 2000-10-10 15 <150> PRIOR APPLICATION NUMBER: PCT/GB98/03766 16 <151> PRIOR FILING DATE: 1998-12-15 18 <150> PRIOR APPLICATION NUMBER: GB 9726539.1 19 <151> PRIOR FILING DATE: 1997-12-16 21 <160> NUMBER OF SEQ ID NOS: 45 23 <170> SOFTWARE: FastSEQ for Windows Version 4.0 25 <210> SEQ ID NO: 1 26 <211> LENGTH: 675 27 <212> TYPE: PRT 28 <213> ORGANISM: Homo sapiens 30 <400> SEQUENCE: 1 31 Asn Leu Val Ala Thr Cys Leu Pro Val Arg Ala Ser Leu Pro His Arg 33 Leu Asn Met Leu Arg Gly Pro Gly Pro Gly Leu Leu Leu Ala Val 35 Leu Cys Leu Gly Thr Ala Val Pro Ser Thr Gly Ala Ser Lys Ser Lys 40 37 Arg Gln Ala Gln Gln Met Val Gln Pro Gln Ser Pro Val Ala Val Ser 39 Gln Ser Lys Pro Gly Cys Tyr Asp Asn Gly Lys His Tyr Gln Ile Asn 70 41 Gln Gln Trp Glu Arg Thr Tyr Leu Gly Asn Val Leu Val Cys Thr Cys 43 Tyr Gly Gly Ser Arg Gly Phe Asn Cys Glu Ser Lys Pro Glu Ala Glu 100 105 45 Glu Thr Cys Phe Asp Lys Tyr Thr Gly Asn Thr Tyr Arg Val Gly Asp 47 Thr Tyr Glu Arg Pro Lys Asp Ser Met Ile Trp Asp Cys Thr Cys Ile 49 Gly Ala Gly Arg Gly Arg Ile Ser Cys Thr Ile Ala Asn Arg Cys His 50 145 155 51 Glu Gly Gly Gln Ser Tyr Lys Ile Gly Asp Thr Trp Arg Arg Pro His 52 165 170

53 Glu Thr Gly Gly Tyr Met Leu Glu Cys Val Cys Leu Gly Asn Gly Lys

55 Gly Glu Trp Thr Cys Lys Pro Ile Ala Glu Lys Cys Phe Asp His Ala

185

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			105													
56			195	_	_		_	200					205			
57	Ala	GIY	Thr	Ser	Tyr	Val	Val	Gly	Glu	Thr	${\tt Trp}$	Glu	Lys	Pro	Tyr	Gln
58		210					215					220				
59	Gly	Trp	Met	Met	Val	Asp	Cys	Thr	Cys	Leu	Gly	Glu	Gly	Ser	Gly	Arq
	225					230					235		_		-	240
61	Ile	Thr	Cvs	Thr	Ser	Ara	Asn	Ara	Cvs	Asn	Asp	Gln	Asn	Thr	Arg	
62			- 1		245	5		5	010	250	1100	U	110p	1111	255	1111
	Sor	Тиг	λνα	Tlo		Acn	The	Tra	Cox		Trea	7 ~~	7 ~~	7	Gly	70
	Ser	туг	Arg		СТУ	Asp	TIIT	пр		ьуѕ	ьуѕ	Asp	ASI	-	GIA	Asn
64	_	_		260					265	_		_		270		
	Leu	Leu		Cys	He	Cys	Thr		Asn	GГУ	Arg	Gly	Glu	Trp	Lys	Cys
66			275					280					285			-
67	Glu	Arg	His	Thr	Ser	Val	Gln	Thr	Thr	Ser	Ser	Gly	Ser	Gly	Pro	Phe
68		290					295					300				
69	Thr	Asp	Val	Arq	Ala	Ala	Val	Tyr	Gln	Pro	Gln	Pro	His	Pro	Gln	Pro
	305	-				310		4			315					320
		Pro	Tvr	Glv	His		Val	Thr	Δen	Ser		Lev.	I eV	Туг	Ser	
72			- 7 -	Or y	325	Cys	vai		TOD	330	OLY	vai	va.	тут		vaı
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	GTÅ	мес	GIII		Leu	ьуs	Thr	GIN		Asn	ьуs	GIn	Met		Cys	Thr
74			_	340					345					350		
75	Cys	Leu	Gly	Asn	Gly	Val	Ser	Cys	Gln	Glu	Thr	Ala	Val	Thr	Gln	Thr
76			355					360					365			
77	Tyr	Gly	Gly	Asn	Ser	Asn	Gly	Glu	Pro	Cys	Val	Leu	Pro	Phe	Thr	Tyr
78		370					375					380				-
79	Asn	Glv	Ara	Thr	Phe	Tvr	Ser	Cvs	Thr	Thr	Glu	Glv	Ara	Gln	Asp	Glv
	385	_	5			390		-1-			395	1	3		1100	400
		T211	Trn	Cvc	Sar		Thr	Sor	7 cm	Тиг		Cln	7. 00	Cln	Lys	
82	111.13	пси	TTP	Cys	405	1111	1111	DET	ASII		Giu	GIII	Asp	GIII	_	ı yı.
	C 0.70	Dla a	C	m1		TT -	ml	TT: 3	-	410	~7	-m)	~7	~7	415	_
	ser	Pne	Cys		Asp	HIS	Thr	vaı		vaı	GIn	Thr	GIn	_	Gly	Asn
84	_		_	420					425					430		
85	Ser	Asn	Gly	Ala	Leu	Cys	His	Phe	Pro	Phe	$_{ m Leu}$	Tyr	Asn	Asn	His	Asn
86			435					440					445			
87	Tyr	Thr	Asp	Cys	Thr	Ser	Glu	Gly	Arg	Arg	Asp	Asn	Met	Lys	Trp	Cys
88		450					455					460				
89	Gly	Thr	Thr	Gln	Asn	Tvr	Asp	Ala	asp	Gln	Lvs	Phe	Glv	Phe	Cys	Pro
	465					470	-		1-		475		1		-7-	480
		Δla	Δla	His	Glu		Tle	Cve	Thr	Thr		Glu	Glaz	17 a 1	Met	
92	••••	1114	III.u	111.0	485	Olu	110	CYS	1111	490	ASII	Giu	Gry	vai		тут
	71 25 25	т1.	C1	7		Шеле	70	T	G1		3		~ 7		495	
	Arg	rre	GIY		GLII	тър	Asp	ьуѕ		HIS	Asp	мес	GIĀ		Met	Met
94				500	_				505					510		
95	Arg	Cys	Thr	Cys	Val	Gly	Asn	Gly	Arg	Gly	Glu	Trp	Thr	Cys	Tyr	Ala
96			515					520					525			
97	Tyr	Ser	Gln	Leu	Arg	Asp	Gln	Cys	Ile	Val	Asp	Asp	Ile	Thr	Tyr	Asn
98		530					535	-			-	540			-	
99	Val	Asn	Asp	Thr	Phe	His	Lvs	Ara	His	Glu	Glu	Glv	His	Met	Leu	Asn
	545		LIGE			550		9	*****	Olu	555		111,5	ricc	пси	
			Crrc	, Dha				- 70	- 01-	. 70				70	. D	560
) IIII	. Суъ	, PIIE			т ст.	ALC	i GT			л тАг	ь Суя	s AST	Pro	
102			_		565					570					575	
		GIr	Cys			Ser	Glu	Thr			? Phe	туг	Glr		e Gly	Asp
104				580)				585	5				590)	

RAW SEQUENCE LISTING DATE: 08/05/2004 PATENT APPLICATION: US/09/581,651C TIME: 10:25:18 Input Set : A:\ERPO1.003APC.TXT Output Set: N:\CRF4\08052004\I581651C.raw 105 Ser Trp Glu Lys Tyr Val His Gly Val Arg Tyr Gln Cys Tyr Cys Tyr 106 595 600 605 107 Gly Arg Gly Ile Gly Glu Trp His Cys Gln Pro Leu Gln Thr Tyr Pro 615 109 Ser Ser Ser Gly Pro Val Glu Val Phe Ile Thr Glu Thr Pro Ser Gln 110 625 630 635 111 Pro Asn Ser His Pro Ile Gln Trp Asn Ala Pro Gln Pro Ser His Ile 645 650 113 Ser Lys Tyr Ile Leu Arg Trp Arg Pro Val Ser Ile Pro Pro Arg Asn 660 114 665 115 Leu Gly Tyr 116 119 <210> SEQ ID NO: 2 120 <211> LENGTH: 2147 121 <212> TYPE: DNA 122 <213> ORGANISM: Homo sapiens 124 <400> SEQUENCE: 2 125 caaacttggt ggcaacttgc ctcccggtgc gggcgtctct cccccaccgt ctcaacatgc 60

126 ttaggggtcc ggggcccggg ctgctgctqc tqqccqtcca qtqcctqqqq acaqcqqtqc 120 127 cctccacggg agcctcgaag agcaagaggc aggctcagca aatgqttcag ccccaqtccc 180 128 cggtggctgt cagtcaaagc aagcccggtt gttatgacaa tggaaaacac tatcagataa 240 129 atcaacagtg ggagcggacc tacctaggca atgcgttggt ttgtacttgt tatggaggaa 300 130 gccgaggttt taactgcgag agtaaacctg aagctgaaga gacttgcttt gacaagtaca 360 131 ctgggaacac ttaccgagtg ggtgacactt atgagcgtcc taaagactcc atgatctggg 420 132 actgtacctg catcggggt gggcgaggga gaataagctg taccatcgca aaccgctgcc 480 133 atgaaggggg tcagtcctac aagattggtg acacctggag gagaccacat gagactggtg 540 134 gttacatgtt agagtgtgtg tgtcttggta atggaaaagg agaatggacc tgcaagccca 600 135 tagctgagaa gtgttttgat catgctgctg ggacttccta tgtggtcgga gaaacgtggg 660 136 agaageeeta eeaaggetgg atgatggtag attgtaettg eetgggagaa ggeageggae 720 137 gcatcacttg cacttctaga aatagatgca acqatcagga cacaaggaca tcctatagaa 780 138 ttggagacac ctggagcaag aaggataatc gaggaaacct gctccagtgc atctgcacag 840 139 gcaacggccg aggagagtgg aagtgtgaga ggcacacctc tgtgcagacc acatcgagcg 900 140 gatetggeee etteaeegat gttegtgeag etgtttaeea aeegeageet eaeeeeeage 960 142 ggctgaagac acaaggaaat aagcaaatgc tttgcacgtg cctgggcaac ggagtcagct 1080 143 qccaaqaqac aqctqtaacc caqacttacq qtqqcaactc aaatqqaqaq ccatqtqtct 1140 144 taccattcac ctacaacqac aqqacqqaca qcacaacttc qaattatqaq caqqaccaqa 1200 145 aatactettt etgeacagae cacaetgttt tggtteagae tegaggagga aattecaatg 1260 146 gtgccttgtg ccacttcccc ttcctataca acaaccacaa ttacactgat tgcacttctg 1320 147 agggcagaag agacaacatg aagtggtgtg ggaccacaca gaactatgat gccgaccaga 1380 148 agtttgggtt ctgccccatg gctgcccacg aggaaatctg cacaaccaat gaaggggtca 1440 149 tgtaccgcat tggagatcag tgggataagc agcatgacat gggtcacatg atgaggtgca 1500 150 cgtgtgttgg gaatggtcgt ggggaatgga catgcattgc ctactcgcag cttcgagatc 1560 151 agtgcattqt tqatqacatc acttacaatq tqaacqacac attccacaaq cqtcatqaaq 1620 152 aggggcacat gctgaactgt acatgettcg gtcagggtcg gggcaggtgg aagtgtgatc 1680 153 ccgtcgacca atgccaggat tcagagactg ggacgtttta tcaaattgga gattcatggg 1740 154 agaagtatgt gcatggtgtc agataccagt gctactgcta tggccgtggc attggggagt 1800 155 ggcattgcca acctttacag acctatccaa gctcaagtgg tcctgtcgaa gtatttatca 1860

156 ctgagactec gagteageec aacteecace ceatecagtg gaatgeacea cagecatete 1920

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```
157 acatttccaa gtacattctc aggtggagac ctgtgagtat cccacccaga aaccttggat 1980
158 actgagtete etaatettat caattetgat ggtttetttt ttteccaget tttgagecaa 2040
159 caactetgat taactattee tatageattt actatatttg tttagtgaac aaacaatatg 2100
160 tggtcaatta aattgacttg tagactgaaa aaaaaaaaa aaaaaaa
162 <210> SEQ ID NO: 3
163 <211> LENGTH: 20
164 <212> TYPE: PRT
165 <213> ORGANISM: Homo sapiens
167 <400> SEQUENCE: 3
168 Ile Ser Lys Tyr Ile Leu Arg Trp Arg Pro Val Ser Ile Pro Pro Arg
169 1
170 Asn Leu Gly Tyr
171
                20
174 <210> SEQ ID NO: 4
175 <211> LENGTH: 21
176 <212> TYPE: PRT
177 <213> ORGANISM: Homo sapiens
179 <400> SEQUENCE: 4
180 Gln Gln Trp Glu Arg Thr Tyr Leu Gly Asn Ala Leu Val Cys Thr Cys
                                         10
182 Tyr Gly Gly Ser Arg
                2.0
186 <210> SEQ ID NO: 5
187 <211> LENGTH: 23
188 <212> TYPE: PRT
189 <213> ORGANISM: Homo sapiens
191 <400> SEQUENCE: 5
192 Pro Cys Val Leu Pro Phe Thr Tyr Asn Asp Arg Thr Asp Ser Thr Thr
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194 Ser Asn Tyr Glu Gln Asp Gln
195
                20
198 <210> SEQ ID NO: 6
199 <211> LENGTH: 20
200 <212> TYPE: PRT
201 <213 > ORGANISM: Homo sapiens
203 <400> SEQUENCE: 6
204 Thr Asp His Thr Val Leu Val Gln Thr Arg Gly Gly Asn Ser Asn Gly
205 1
206 Ala Leu Cys His
207
210 <210> SEQ ID NO: 7
211 <211> LENGTH: 21
212 <212> TYPE: PRT
213 <213 > ORGANISM: Homo sapiens
215 <400> SEQUENCE: 7
216 Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Ile Ala Tyr Ser Gln Leu
217 1
                    5
218 Arg Asp Gln Cys Ile
219
```

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Input Set : A:\ERPO1.003APC.TXT

Output Set: N:\CRF4\08052004\I581651C.raw

```
222 <210> SEQ ID NO: 8
223 <211> LENGTH: 21
224 <212> TYPE: PRT
225 <213> ORGANISM: Homo sapiens
227 <400> SEQUENCE: 8
228 Gln Gln Trp Glu Arg Thr Tyr Leu Gly Asn Val Leu Val Cys Thr Cys
229 1
230 Tyr Gly Gly Ser Arg
231
                20
234 <210> SEQ ID NO: 9
235 <211> LENGTH: 39
236 <212> TYPE: PRT
237 <213> ORGANISM: Homo sapiens
239 <400> SEQUENCE: 9
240 Glu Pro Cys Val Leu Pro Phe Thr Tyr Asn Gly Arg Thr Phe Tyr Ser
241 1
                     5
                                         10
242 Cys Thr Thr Glu Gly Arg Gln Asp Gly His Leu Trp Cys Ser Thr Thr
               20
                                     25
244 Ser Asn Tyr Glu Gln Asp Gln
            35
248 <210> SEQ ID NO: 10
249 <211> LENGTH: 21
250 <212> TYPE: PRT
251 <213> ORGANISM: Homo sapiens
253 <400> SEQUENCE: 10
254 Cys Thr Asp His Thr Val Leu Val Gln Thr Gln Gly Gly Asn Ser Asn
                     5
256 Gly Ala Leu Cys His
257
                2.0
260 <210> SEQ ID NO: 11
261 <211> LENGTH: 21
262 <212> TYPE: PRT
263 <213> ORGANISM: Homo sapiens
265 <400> SEQUENCE: 11
266 Val Gly Asn Gly Arg Gly Glu Trp Thr Cys Thr Ala Tyr Ser Gln Leu
268 Arg Asp Gln Cys Ile
269
                20
272 <210> SEQ ID NO: 12
273 <211> LENGTH: 20
274 <212> TYPE: PRT
275 <213> ORGANISM: Homo sapiens
277 <400> SEQUENCE: 12
278 Ile Ser Lys Thr Ile Leu Arg Trp Arg Pro Lys Asn Ser Val Gly Arg
279 1
                     5
                                         10
280 Trp Lys Glu Ala
281
                20
284 <210> SEQ ID NO: 13
285 <211> LENGTH: 18
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RAW SEQUENCE LISTING ERROR SUMMARY

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:37; Xaa Pos. 676,679,683,717

VERIFICATION SUMMARY

DATE: 08/05/2004 PATENT APPLICATION: US/09/581,651C TIME: 10:25:19

Input Set : A:\ERPO1.003APC.TXT

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L:763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:672 L:767 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:704